

receivers<sup>29/</sup> and eagerly awaits the cable industry's response. It is essential that, like all industry-wide standards, standards for cable-ready DTV receivers be developed and negotiated through an official standard-setting body, such as CEMA, with the full participation of all affected industries.

**B. Adoption of Industry Standards Implementing the 1394 Interface Will Not Be a Panacea for Resolving Cable Compatibility Problems.**

As the Commission is well aware, the consumer electronics and cable industries have been engaged in an effort to establish standards that will enable the implementation of a digital bus through which DTV receivers could connect with multiple digital devices, including VCRs, DVD players, and cable set-top boxes, thus forming a complete integrated and interoperable system. Thomson, through its membership in CEMA, is committed to completing work on the baseline 1394 standard, as soon as practicable, and to making 1394-equipped DTV receivers available to the public as quickly as possible.<sup>30/</sup> The baseline 1394 interface, however, will not provide for optimal compatibility with cable systems and should not be lionized as such by the Commission. There are several reasons for this cautionary note.

First, a baseline 1394 standard cannot be used to receive encrypted or "scrambled" DTV signals, such as would be used to transmit copy protected programming, e.g., movies and pay-per-view offerings. As a result, the baseline 1394 interface will only work for DTV transmissions sent "in the clear" (e.g., over-the-air broadcast signals).<sup>31/</sup> As the Commission is aware, members

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<sup>29/</sup> See Letter from Gary Shapiro, CEMA, to Chairman William E. Kennard (September 10, 1998) (discussing CEMA's involvement in the development of cable-ready DTV receivers and attaching proposed standards).

<sup>30/</sup> Thomson is proposing, through CEMA, its own 1394 copy protection standard.

<sup>31/</sup> We note, however, that, given the nature of digital technology, such "in the clear" transmissions also will be subject to potential unauthorized copying and editing. For example, it would be entirely possible for someone to digitally record, edit and duplicate, in unlimited numbers and without generational degradation, a movie such as "Titanic" once it is transmitted by a broadcaster in DTV.

of the creative community have attempted, so far without success, to approve a 1394 copy protection standard. Until these critical standards are adopted, the 1394 interface will not be capable of providing cable consumers with access to the full array of DTV programming and services.

Nor does the 1394 firewire resolve the problem that would be faced by the first DTV receivers coming into the market, the legacy receivers, which will not be "retrofitable." Finally, the 1394 interface approach, by its very design, assumes the need for a consumer to rent or purchase a cable set-top box. That is by no means the most consumer-friendly approach to receiving DTV over cable. Taken together, these factors render the 1394 firewire a partial and, most likely, interim solution to the cable compatibility issue which could well be made obsolete quickly when a superior approach (such as a cable-ready DTV receiver) is available.

**V. A COMPETITIVE MARKETPLACE WILL ENSURE CONSUMERS' EXPECTATIONS FOR OFF-AIR RECEPTION OF DTV BROADCAST TRANSMISSIONS ARE MET AND EXCEEDED.**

Notwithstanding claims by some, consumer electronics manufacturers have worked tirelessly -- successfully -- to ensure that every one of its DTV receivers is uniformly capable of receiving over-the-air DTV signals. Thomson is confident that its DTV receivers will be uniformly capable of receiving and displaying off-air DTV signals, with little to no difficulty or confusion being imposed upon the consumer, and has and will continue to devote substantial resources to ensuring that consumers purchasing its DTV receivers are entirely satisfied with their receiver's performance.<sup>32/</sup>

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<sup>32/</sup> Specifically, Thomson, through its retail representatives, will work with consumers to ensure that he or she is equipped with an antenna that maximizes reception according to the customer's location. This process will make use of a comprehensive mapping project, conducted under the auspices of CEMA and USSB, which will enable retailers to match every consumer with the antenna most appropriate to their specific location.

Given the powerful marketplace pressures that will be visited on all consumer electronics manufacturers offering new DTV products, and consistent with the consumer electronics industry's consistent warning that government-mandated standards are both unnecessary and not in the best interests of consumers,<sup>33/</sup> Thomson urges the Commission to allow the marketplace to drive developments and improvements in DTV technology and receivers. Additionally, the Commission need not revisit its earlier decision not to regulate in the area of input selector, or "A/B" switches. These switches, which allow the viewer to toggle between off-air delivery of broadcast signals and other means of delivery (i.e., cable, satellite) will be a standard feature in all of Thomson's DTV receivers, usually located on the receiver's remote control unit, based on our assessment that such a feature will respond to consumer demands for an easy-to-operate method of accessing DTV signals directly off-air. In the future, as the DTV transition evolves and as alternative video delivery systems become fully integrated in the carriage of DTV signals, manufacturers will implement upgrades or improvements to A/B switch technology as needed.

## **VI. CONCLUSION.**

For the reasons stated above, Thomson urges the Commission to adopt rules in this proceeding, which, above all, ensure that (1) every cable consumer is able to access and enjoy the full benefits of DTV; and (2) cable operators are not permitted to abuse their gatekeeper power to limit the ability of their subscribers to participate in the DTV revolution in a manner that suits their own needs. These objectives can best be accomplished if the Commission adopts rules mandating that (1) cable operators deliver DTV signals to their subscribers without material degradation; and (2) cable operators deliver to their subscribers every 6 MHz DTV channel in its

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<sup>33/</sup> See Reply Comments of the Electronic Industries Association and the EIA Advanced Television Committee in the *Sixth Further Notice of Proposed Rulemaking* in MM Docket 87-268 (January 26, 1996).

entirety, including the maintenance of program related data within PSIP, and without alteration or deletion of USER data and competitive EPG information.

The Commission should follow a transitional approach to ensure cable compatibility with DTV signals, beginning, until viable alternatives exist, with a requirement that cable operators provide, in some fashion, an 8 VSB output of all DTV signals for input to a DTV receiver. While the Commission is correct in encouraging agreement on a baseline IEEE 1394 standard, it should recognize the limitations of that approach as a solution to cable-DTV receiver compatibility problems. The Commission would be well advised to focus more energy on the early adoption of standards for cable-ready DTV receivers through inter-industry discussions in open, transparent standard-setting and technical fora. The Commission must be prepared to commence its own technical standard setting proceeding if these voluntary standard setting activities are not productive.

The Commission should refrain from adopting DTV receiver standards. Thomson is committed to ensuring that all of its DTV receivers accept all adopted industry transmission standards. The marketplace, not government mandates, will best ensure optimal DTV receiver performance and consumer satisfaction.

Respectfully submitted,

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